



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,200	04/16/2004	Kazumi Totaka	723-1505	7673

23117 7590 04/13/2007
NIXON & VANDERHYE, PC
901 NORTH GLEBE ROAD, 11TH FLOOR
ARLINGTON, VA 22203

EXAMINER

TORIMIRO, ADETOKUNBO OLUSEGUN

ART UNIT	PAPER NUMBER
----------	--------------

3714

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/13/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/825,200

Applicant(s)

TOTAKA ET AL.

Examiner

Adetokunbo O. Torimiro

Art Unit

3714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 04/16/2004, 10/13/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

1. The Preliminary amendment filed on 03/02/2007 has been entered. Original claims 1-9 have been amended. New claims 10-16 have been added.

Claim Objections

2. Claim 1 is objected to because of the following informalities:

Claim 1, line 14: "the sound output" should be -- a sound output --.

Claim 1, line 18: "a processor" should be -- the processor --.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1,4,5, and 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re claims 1,4,5, and 7: the limitation, "storage medium that stores a game BGM" in line 1 and the limitation "said game apparatus comprising ..." in line 3 renders the claim indefinite because it is unclear as to exactly what is being claimed. It is unclear if the storage medium is being claimed or if it is the game apparatus.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-4 and 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crowley (US 6,096,962) in view of Koguchi (US 5,148,419).

Re claims 1,8, and 9: Crowley teaches a storage medium that stores a game BGM / *background music* generating program to be executed by a game apparatus processor (see col.2, lines 30-40), said game apparatus comprising a phrase data storage area that stores different kinds of a plurality of phrase data, by each group based on a musical characteristics (see fig.2B; col.2, lines 48-51 and col.2, line 64-col.3, line 11); a rhythm-pattern storage area (320) that stores at least one kind of rhythm pattern data, constructed of two or more rhythm, that designate a length in performance for performing a phrase, and a pronunciation timing of said phrase (see fig.1; col.3, lines 12-20 and col.12, lines 40-43); BGM data reproducing programmed logic circuitry that reproduces BGM data constructed of at least one part; sound outputting programmed logic circuitry (500) that outputs a sound according to the BGM data reproduced by said BGM data reproducing programmed logic circuitry (see fig.1B; col.2, lines 51-56), wherein said game BGM generating program being executed by a processor (140) of said game apparatus to perform the steps of randomly selecting one kind of the phrase data from one group

Art Unit: 3714

stored in said phrase data storage area (see col.4, lines 5-9); selecting one rhythm data from one kind of the rhythm pattern data stored in said rhythm-pattern storage area according to a predetermined rule (see col.12, lines 57-60); and generating the BGM data from the phrase data selected by said randomly selecting one kind of the phrase and the rhythm data selected by said selecting one kind of rhythm data (see col.2, lines 30-40).

However, Crowley fails to teach a tone-color-data storage area that stores data of the sound output according to said BGM data.

Koguchi teaches a tone-color-data storage area that stores data of the sound output according to said BGM data (see col.4, lines 65-68).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a tone-color-data storage area that stores data of the sound output according to said BGM data since tone and musical sound data has to be included in the BGM generating program so has to have a complete sound database.

Re claim 2: Crowley teaches a storage medium that stores a game BGM / *background music* generating program (see col.2, lines 30-40), wherein said selecting one kind of rhythm includes randomly selecting the rhythm data from one kind of said rhythm pattern data (see col.12, lines 40-43 and lines 57-60).

Re claim 3: Crowley teaches a storage medium that stores a game BGM generating program, wherein said rhythm selecting step includes sequentially selecting the rhythm data from one kind of said rhythm pattern data in predetermined order (see col.12, lines 57-60).

Re claim 4: Crowley teaches a storage medium that stores a game BGM generating program, wherein said game apparatus further comprises a continuous counter (160) for counting the number of times the same phrase has been selected (see **fig.1A; col.3, lines 50-53**), said randomly selecting one kind of the phrase includes incrementing said continuous counter when the phrase data selected last time and the phrase data selected this time agree (see **col.11, lines 41-43**); and reselecting the phrase data when a count value of said continuous counter is larger than a predetermined value (see **col.10, lines 22-28**).

Re claim 7: Crowley teaches a storage medium that stores a game BGM generating program, wherein said game apparatus further comprises a period designating data storage area that stores period designating data that designates a performing period / *play mode* and a performance suspended period / *don't play mode* of the phrase, said BGM data reproducing programmed logic circuitry suspends a reproduction of the BGM data in the performance suspended period based on said period designating data (see **fig.3; col.4, lines 39-47 and col.8, lines 39-42**), and allows said processor to execute the step of counting the performing period and the performance suspended period designated by said period designating data by the number of times the rhythm data has been selected (see **fig.3; col.9, lines 8-28**). **It is apparent to examiner that since there is a play mode present, there will be a mode also present for the don't play mode.**

Re claim 10: Crowley teaches a method for generating a sequence of BGM, comprising the steps of: providing at least one set of rhythm data (see **fig.1; col.3, lines 12-20 and col.12, lines 40-43**), providing at least one set of phase data (see **fig.2B; col.2, lines 48-51 and col.2, line 64-col.3, line 11**), selecting a set of rhythm data from the at least one set of rhythm data (see **col.12, lines 40-43 and lines 57-60**), selecting a set of phase data from the at least one set of phase data (see **col.4, lines 5-9**), and generating BGM data from the selected rhythm data and the selected phase data (see **col.2, lines 30-40**).

Re claim 11: Crowley teaches the method wherein the selecting a set of phase data further comprises the steps of counting the number of times the currently selected set of phase data has been continuously selected (see **fig.1A; col.3, lines 50-53**), and re-selecting a new set of phase data if the currently selected phase data has been continuously selected more than a predetermined number of times (see **col.10, lines 22-28**).

Re claims 12 and 13: Crowley teaches the method wherein the selecting a set of rhythm data includes randomly selecting a set of rhythm data; and wherein the selecting a set of rhythm data includes sequentially selecting a set of rhythm data (see **col.12, lines 40-43 and lines 57-60**).

Re claim 14: Crowley teaches the method wherein the selecting a set of phase data includes randomly selecting a set of phase data (see **col.3, lines 12-20**).

Re claim 15: Crowley teaches the method wherein the selecting a one rhythm data includes randomly selecting a rhythm data; and wherein the selecting a one rhythm data includes sequentially selecting a rhythm data (see col.12, lines 57-60).

7. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crowley (US 6,096,962) in view of Koguchi (US 5,148,419) and further in view of Ishikawa et al (US 2001/0016510). The teachings of Crowley and Koguchi have been discussed above.

Re claim 5: Crowley teaches a storage medium that stores a game BGM generating program.

However, Crowley fails to teach a storage medium that stores a game BGM generating program wherein said game apparatus further comprises at least one operating control that inputs an operation from a player; and performance change data storage area that stores performance change data that changes a performing method of a BGM and further is used by said processor in execution of the following steps, of storing performance change data corresponding to at least the operation of said performance change data storage area; and applying a predetermined change to said BGM data corresponding to the performance change data stored in said performance change data storage area by said storing performance change data.

Ishikawa et al teaches a storage medium that stores a game BGM generating program (see par. [0002]) wherein said game apparatus further comprises at least one operating control (32) that inputs an operation from a player (see fig.1; par. [0011], lines 1-3); and performance change data storage area that stores performance change data that changes a performing method of a BGM and further is used by said processor in execution of the following steps, of storing

Art Unit: 3714

performance change data corresponding to at least the operation of said performance change data storage area; and applying a predetermined change to said BGM data corresponding to the performance change data stored in said performance change data storage area by said storing performance change data (see par. [0012]).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to include an operating control for inputting operations and performance change data storage in the BGM generating program since games that utilizes BGM requires input from players in order for there to be change in the performance and hence performance change data and a storage area to store the performance change data so has to allow storage of performance change data, thereby making the game more interesting by allowing player input.

Re claim 6: Crowley teaches a storage medium that stores a game BGM generating program.

However, Crowley fails to teach a storage medium that stores a game BGM generating program wherein applying a predetermined change includes changing a tempo of said BGM data according to said performance change data.

Ishikawa et al teaches a storage medium that stores a game BGM generating program wherein applying a predetermined change includes changing a tempo of said BGM data according to said performance change data (see par. [0017], lines 1-5)).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a change in tempo of the BGM which a performance change data

Art Unit: 3714

so as to increase the level of interaction between the player and the game thereby making the game more interesting and enjoyable for the player.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ichikawa discloses a method of and apparatus for composing a melody by switching musical phrases, and program storage medium readable by the apparatus for composing a melody; Kurakake et al discloses an apparatus and method for automatically generating musical composition data for use on portable terminal.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adetokunbo O. Torimiro whose telephone number is (571) 270--1345. The examiner can normally be reached on Mon-Fri (8am - 4pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pezzuto can be reached on (571) 272-6996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

AT

 4/12/07
KIM NGUYEN
PRIMARY EXAMINER